

Connecticut Chapter
P.O. Box 270595
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February 19, 2021

Dear Senator Needleman, Representative Arconti, Senator Winfield, Representative Allie-Brennan, Senator Formica, Representative Ferraro and members of the Energy and Technology Committee,

On behalf of the Sierra Club and our more than 40,000 members and supporters in Connecticut, thank you for the opportunity to testify on several issues before you today.

The Sierra Club is committed to solving the climate crisis with just and equitable solutions that will result in a healthy world for everyone. Here in Connecticut we are already feeling the impacts of climate change. In November 2020, the Governor's Council on Climate Change Science and Technology Working Group reported that we can expect local impacts including higher temperatures, sea level rise, drought risk, greater precipitation, and stronger storms in the coming decades. We are also feeling the health impacts of climate-destroying fossil fuel combustion with some of the worst ozone pollution in the nation, and high rates of asthma disproportionately borne by environmental justice communities. A Harvard report released last week shows that an annual 8 million premature deaths worldwide and over 350,000 in the United States were a direct consequence of burning fossil fuel.

To avoid the worst impacts of climate change and the health threat of air pollution, we must reduce the use of fossil fuels. In recognition of the need to address climate-destroying greenhouse gases, Connecticut passed the Global Warming Solutions Act (GWSA) mandating a reduction of greenhouse gas emissions below 2001 levels by 45% by 2030 and 80% by 2050. Connecticut must now focus on critically needed strategies to meet the decarbonization requirements of the GWSA such as a moratorium on new fossil fuel infrastructure, a planned phase out of fossil fuel energy generation and infrastructure, aggressive energy efficiency investments, clean energy generation, building electrification, and non-pipes alternatives.

With that context in mind, Sierra Club Connecticut offers this testimony.

HB 6409 - An Act Concerning the Solicitation of Biogas Injection Proposals from Anaerobic Digestion Facilities

The Sierra Club opposes the adoption of any law that would permit the injection of biogas from anaerobic digestion facilities into the gas distribution system in the state. As demonstrated by Sierra Club investigations into gas line leaks in Connecticut in 2019⁴ and 2016⁵, leaks in Connecticut's gas

https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3-working-group-reports/GC3-Science-and-Technology-Working-Group-Final-Report-11-19-20.pdf

https://www.google.com/url?q=https://portal.ct.gov/-/media/DEEP/energy/IRP/2020-IRP/2020-CT-DEEP-Draft-Integrated-Resources-Plan-in-Accordance-with-CGS-16a-3a.pdf&sa=D&source=editors&ust=1612307098281000&usg=AOvVaw15H4cjW5Hp_vcg_qIRhWGz

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³ https://www.seas.harvard.edu/news/2021/02/deaths-fossil-fuel-emissions-higher-previously-thought

⁴ https://66f28e57-02e8-44f5-8613-feb302092242.usrfiles.com/ugd/66f28e_ebfb4cee05294559a95da105a88583fb.pdf

⁵ https://ctsierraclub.wixsite.com/sierraclub-ct/hartford-mobile-methane-leaks-study

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distribution system are pervasive and persistent. Gas leaking from the pipeline system is primarily composed of methane, a short-lived but powerful greenhouse gas that has 87 times the global warming impact as CO2 over 20 years. Recent research from Robert Howarth⁶ shows that methane leaks have been identified as an accelerant of climate change. Injecting additional methane into this leaky distribution system should not be permitted.

Transitioning off fossil gas is necessary to meet the requirements of the GWSA, and at this time, Connecticut must begin to plan how we will reduce our gas pipeline system, not add to it. Instead, use of biogas from anaerobic digesters should be limited to onsite consumption. Additionally, planning should take place to strategically locate all future anaerobic digesters. With such planning, any excess gas can be directed to hard-to-electrify sectors such as industry, long-distance transportation, aviation, and use in electricity generation as longer term energy storage to balance seasonal wind and solar resources. Injecting biogas into pipelines is a recognized effort of the gas industry to keep us tethered to gas pipeline systems as is highlighted in "Rhetoric vs. Reality: The Myth of 'Renewable Natural Gas' for Building Decarbonization," a report by EarthJustice and Sierra Club.

It is also important to note that biogas is not necessarily environmentally suitable. Before considering capturing and using waste methane as a fossil gas alternative, Connecticut should examine whether the methane emissions could be prevented in the first place through better resource or waste management practices.

Sierra Club Connecticut urges you to reject this bill and instead require biogas generated by anaerobic digesters to be used onsite or to locate digesters near hard to electrify applications.

HB 6412 - An Act Concerning a Low-Carbon Fuel Blend of Heating Oil and the Establishment of a Bioheat Advisory Board

Sierra Club Connecticut opposes Section E of HB 6412 to include low-carbon fuel blend analysis in the Comprehensive Energy Strategy. According to the most current Connecticut Greenhouse Gas Inventory, roughly 26% of greenhouse gas emissions come from on-site fuel combustion in homes and commercial businesses. To meet the emissions reductions of the GWSA, Connecticut will need buildings to transition from fossil fuels to being mostly electric. In its 2019 "Building a Low Carbon Future" report, the Governor's Council on Climate Change recommended that in concert with building energy conservation improvements, Connecticut accelerate decarbonizing building energy end-uses through increasing deployment of cold-climate air- and ground-source heat pumps and heat pump water heaters.⁸

https://portal.ct.gov/-/media/DEEP/climatechange/publications/BuildingaLowCarbonFutureforCTGC3Recommendationspdf.pdf

 $http://www.eeb.cornell.edu/howarth/publications/f_EECT-61539-perspectives-on-air-emissions-of-methane-and-climatic-warmin_100815_27470.pdf$

⁷ https://earthjustice.org/sites/default/files/feature/2020/report-decarb/Report_Building-Decarbonization-2020.pdf

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Recently modeling for NYSERDA by Energy and Environmental Economics ("E3")⁹ to identify pathways to reach New York's emissions reductions and net carbon neutral goals under the state's Climate Leadership and Community Protection Act (CLCPA), found that "Buildings must transition from using several fuels today (i.e., natural gas, oil, electricity) to being mostly electric in a carbon neutral future." E3's modeling shows that the building sector's decarbonization consistent with the CLCPA goals will not be supported by anything beyond marginal or no on-site fuel use. The CLCPA requires an 85% reduction in greenhouse gas emissions relative to 1990 levels by 2050 (New York to be carbon neutral, including offsets).

Additionally, DEEP's draft Integrated Resources Plan (IRP)¹⁰ recognizes that current blend levels are unlikely to provide significant greenhouse gas reduction benefits relative to other renewable thermal resources and that depending on the production process, feedstock, and timeframe of the analysis, biodiesel may be responsible for even more greenhouse gases than fossil fuels on an energy-equivalent basis. The draft IRP also correctly notes that biodiesel combustion would potentially increase NOx emissions, harming both the human respiratory system and the atmosphere as a precursor to ozone.

Connecticut's Comprehensive Energy Strategy should be focusing instead on how to quickly ramp up energy efficiency, rapid deployment of electric heat pumps and hot water heaters, and a planning process for an orderly retirement of the gas pipeline system to meet the decarbonization requirements of the GWSA in homes and commercial businesses.

SB 863 - An Act Concerning Energy Efficiency Standards

Sierra Club Connecticut supports SB 863 to update and expand energy and water efficiency standards for commonly used home and commercial appliances and electronics sold in Connecticut. Energy efficiency is a vital component of our state's transition to clean energy, and to reducing greenhouse gases as required by the GWSA. This bill will achieve significant environmental benefits by reducing energy waste while saving consumers money.

By 2025, these standards are estimated to save Connecticut consumers approximately \$68 million annually while making significant annual cuts in carbon dioxide emissions from electric generation and water consumption.

Thank you for consideration of our testimony.

Sincerely,

Samantha Dynowski, State Director Sierra Club Connecticut

https://portal.ct.gov/-/media/DEEP/energy/IRP/2020-IRP/2020-CT-DEEP-Draft-Integrated-Resources-Plan-in-Accordance-with -CGS-16a-3a.pdf

⁹ https://climate.ny.gov/-/media/CLCPA/Files/2020-06-24-NYS-Decarbonization-Pathways-Report.pdf